

10/526067
BT01 Rec'd PCT/P 28 FEB 2005

network by an HO origin frequency; and
a combining step for receiving and combining mutually identical data that
are transmitted by the HO origin frequency and the HO destination
frequency from said mobile communication network using said gaps at
the time of said inter-frequency HO.

30.

31. A program according to claim 29, said program comprising a
measurement step for measuring reception quality based on combined data
obtained by said combining step, wherein, based on this reception quality,
variable control is implemented over a target reception quality that is used to
control a transmission power of downlink between said mobile communication
network and said mobile station,
and wherein

said reception quality is the reception SIR (Signal-to-Interference Ratio),
and said target reception quality is the target SIR.

32.

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44.

45.

46.

47. (Cancelled)

48.

49.

50.

48. (Cancelled)

49. (Cancelled)

50. (Cancelled)

said reception quality is the reception SIR (Signal-to-Interference Ratio), and said target reception quality is the target SIR.

32. (Cancelled)

33. A base transceiver station that includes a compressed mode, which is a mode of intermittent communication having gaps in which communication is not carried out in mobile communication between a mobile station and a base transceiver station; said base transceiver station comprising:
transmission means for, at the time of an inter-frequency HO (Hand Over), using said gaps to transmit, to said mobile station by the HO destination frequency, data that are identical to data that are transmitted from the HO origin base transceiver station to the mobile station by the HO origin frequency.

34. A base transceiver station according to claim 33, said base transceiver station comprising combining means for, when the base transceiver station is both the HO destination base transceiver station and the HO origin base transceiver station at the time of said inter-frequency HO, receiving and combining mutually identical data that are transmitted by the HO origin frequency and the HO destination frequency from said mobile station using said gaps at the time of said inter-frequency HO.

35. A base transceiver station according to claim 34, said base transceiver station comprising measurement means for measuring reception quality based on output data of said combining means and, based on this reception quality, implementing variable control over a target reception quality

that is used to control the transmission power of the uplink between its own station and said mobile station.

36. A base transceiver station according to claim 35, wherein said reception quality is the reception SIR (Signal-to-Interference Ratio), and said target reception quality is the target SIR.

37. A base transceiver station according to claim 34, said base transceiver station comprising means for constantly transmitting a common pilot signal, which is a reference signal, wherein said mobile station monitors this common pilot signal in said gaps, and the transmission of identical data by said transmission means and the transmission of identical data by said mobile station begin after the completion of monitoring of the common pilot signal by said mobile station.

38. A program for causing a computer to execute operations of a base transceiver station that includes a compressed mode, which is a mode of intermittent communication having gaps in which communication is not carried out in mobile communication between a mobile station and a base transceiver station, said program comprising:

a transmission step for, at the time of an inter-frequency HO (Hand Over), using said gaps to transmit, to said mobile station by the HO destination frequency, data that are identical to data that are transmitted from said HO origin base transceiver station to said mobile station by the HO origin frequency.

39. A program according to claim 38, said program comprising a

combining step for, when a base transceiver station is both the HO destination base transceiver station and the HO origin base transceiver station at the time of said inter-frequency HO, receiving and combining mutually identical data that are transmitted by the HO origin frequency and the HO destination frequency from said mobile station using said gaps at the time of said inter-frequency HO.

40. A program according to claim 39, said program comprising a measurement step for measuring reception quality based on combined data obtained by said combining step, wherein, based on this reception quality, variable control is implemented over the target reception quality that is used to control the transmission power of the uplink between its own station and said mobile station.

41. A program according to claim 40, wherein said reception quality is reception SIR (Signal-to-Interference Ratio), and said target reception quality is the target SIR.

42. A program according to claim 39, said program comprising a step for constantly transmitting a common pilot signal that is a reference signal, wherein said mobile station monitors this common pilot signal in said gaps, and the transmission of identical data in said transmission step and the transmission of identical data by said mobile station begin after completion of monitoring of the common pilot signal by said mobile station.

43. A radio network controller in a mobile communication system that includes a compressed mode, which is a mode of intermittent communication having gaps in which communication is not carried out in mobile

communication between a mobile station and a mobile communication network, said radio network controller comprising:

a selective combining means for, at the time of an inter-frequency HO (Hand Over), receiving mutually identical data that are transmitted from the mobile station by the HO origin frequency by way of the HO origin base transceiver station and by the HO destination frequency by way of the HO destination base transceiver station by using gaps and then selectively combining the data.

44. (Cancelled)

45. (Cancelled)

46. (Cancelled)

47. A program for causing a computer to execute the operations of a radio network controller in a mobile communication system that includes a compressed mode, which is a mode of intermittent communication having gaps in which communication is not carried out in mobile communication between a mobile station and a mobile communication network, said program comprising:

a selective combining step for, at the time of an inter-frequency HO (Hand Over), receiving mutually identical data that are transmitted by using said gaps from said mobile station by the HO origin frequency by way of HO origin base transceiver station and by the HO destination frequency by way of the HO destination base transceiver station and selectively combining the data.